BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. 3000000.00

Name of Work: Asphalting to road from N.H road towards kerekodi road , main road and cross roads at Venkatal village in Ward no-01 Kempegowda of Yelahanka sub division

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 Page No.143. Item No.19.14	cum							
	for road								
	bad reaches of 2nd main road		1	3.50	2.50	0.30	2.63		
			1	2.00	2.50	0.30	1.50		
			1	3.20	1.50	0.30	1.44		
			4	3.80	1.50	0.30	6.84		
			1	5.20	3.60	0.30	5.62		
			1	3.80	2.90	0.30	3.31		
			1	15.00	1.20	0.30	5.40		
			1	3.60	2.20	0.30	2.38		
			1	15.00	1.80	0.30	8.10		
			1	8.00	3.50	0.30	8.40		
			1	9.00	3.20	0.30	8.64		
			1	6.00	3.80	0.30	6.84		
			1	6.60	4.20	0.30	8.32		
			1	16.00	1.50	0.30	7.20		
	bad reaches of 2nd main 3rd cross road		1	15.00	1.80	0.30	8.10		
			1	8.00	3.50	0.30	8.40		
			1	9.00	3.20	0.30	8.64		
			1	6.00	3.80	0.30	6.84		
			1	6.60	4.20	0.30	8.32		
			1	16.00	1.50	0.30	7.20		
	bad reaches of 2nd main 4th cross road		1	6.00	3.80	0.30	6.84		
			1	6.60	4.20	0.30	8.32		
			1	16.00	1.50	0.30	7.20		

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	SB UGD cutting portion		1	160.00	2.00	0.30	96.00		
							242.45	**125.59**	**30449.13**
	Basic Rate	41.00							
	Area Weightage 6%	2.46							
	Grand Total	43.46							
	oading and unloading + Basic Rate for Haulage upto 8.00 k.m =(1.28 X 2.50 X 8)+ 57	77.48							
	Area Weightage 6%	4.65							
		125.59							
	KSRRB M300-19. Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per sepecification .MORTH Specification NO.301KBS Page No.144 Item No.19.2	cum							
	Desilting of existing drains								
	2nd main road		2	200.00	0.60	0.45	108.00		
	2nd main road 3rd cross road		2	115.00	0.60	0.45	62.10		
	2nd main road 4th cross road		2	39.00	0.60	0.45	21.06		
	2nd main road 5th cross road		2	116.00	0.60	0.45	62.64		
							253.80	**36.04**	**9146.95**
	Basic Rate	34.00							
	Area Weightage 6%	2.04							
	Grand Total	36.04							
7	**Removing & Refixing of stone slabs of drains and pointing in C.M (1:3) page no-27. I. no-5.33**	**Sqm**							
	2nd main road		2	200.00	0.90		360.00		
	2nd main road 3rd cross road		2	115.00	0.90		207.00		
	2nd main road 4th cross road		2	39.00	0.90		70.20		
	2nd main road 5th cross road		2	116.00	0.90		208.80		
							846.00		
	65% avilable						**549.90**		

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
							549.90	111.30	61203.87
	Basic Rate	**105.00**							
	Area Weightage 6%	6.30							
	Grand Total	111.30							
	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting , including form work, cost of alll materials, labour,hire charges of chinery,loading ,unloading ,lead and lift, transportation etc ,copmplete. (Data Rate)	**Sqm**							
	missing slabs								
	2nd main road		2	200.00	0.90		360.00		
	2nd main road 3rd cross road		2	115.00	0.90		207.00		
	2nd main road 4th cross road		2	39.00	0.90		70.20		
	2nd main road 5th cross road		2	116.00	0.90		208.80		
							846.00		
	consider 35% of missing slabs						**296.10**		
							296.10	**2337.00**	**691985.70**
	Date Rate	**2337.00**							
15	**Construction of granular sub base Grading-V as Sub-base and drainage layer by providing** coarse graded crushed stone aggregates of granite/trap/basalt material, mixing by mix in place method byrotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. Page No.153 Item No.20.6	**cum**							
	bad reaches of 2nd main road		1	3.50	2.50	0.15	1.31		
			1	2.00	2.50	0.15	0.75		
			1	3.20	1.50	0.15	0.72		
			4	3.80	1.50	0.15	3.42		

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			1	5.20	3.60	0.15	2.81		
			1	3.80	2.90	0.15	1.65		
			1	15.00	1.20	0.15	2.70		
			1	3.60	2.20	0.15	1.19		
			1	15.00	1.80	0.15	4.05		
			1	8.00	3.50	0.15	4.20		
			1	9.00	3.20	0.15	4.32		
			1	6.00	3.80	0.15	3.42		
			1	6.60	4.20	0.15	4.16		
			1	16.00	1.50	0.15	3.60		
	bad reaches of 2nd main 3rd cross road		1	15.00	1.80	0.15	4.05		
			1	8.00	3.50	0.15	4.20		
			1	9.00	3.20	0.15	4.32		
			1	6.00	3.80	0.15	3.42		
			1	6.60	4.20	0.15	4.16		
			1	16.00	1.50	0.15	3.60		
	bad reaches of 2nd main 4th cross road		1	6.00	3.80	0.15	3.42		
			1	6.60	4.20	0.15	4.16		
			1	16.00	1.50	0.15	3.60		
	BWSSB UGD cutting portion		1	160.00	2.00	0.15	48.00		
							121.23	**1855.00**	**224873.30**
	Basic Rate	1750.00							
	Area Weightage 6%	105.00							
	Grand Total	1855.00							
16	KSRRB M400-17. **Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406. Page No. 155. Item No.20.18	**cum**							
	bad reaches of 2nd main road		1	3.50	2.50	0.15	1.31		
			1	2.00	2.50	0.15	0.75		
			1	3.20	1.50	0.15	0.72		
			4	3.80	1.50	0.15	3.42		

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			1	5.20	3.60	0.15	2.81		
			1	3.80	2.90	0.15	1.65		
			1	15.00	1.20	0.15	2.70		
			1	3.60	2.20	0.15	1.19		
			1	15.00	1.80	0.15	4.05		
			1	8.00	3.50	0.15	4.20		
			1	9.00	3.20	0.15	4.32		
			1	6.00	3.80	0.15	3.42		
			1	6.60	4.20	0.15	4.16		
			1	16.00	1.50	0.15	3.60		
	bad reaches of 2nd main 3rd cross road		1	15.00	1.80	0.15	4.05		
			1	8.00	3.50	0.15	4.20		
			1	9.00	3.20	0.15	4.32		
			1	6.00	3.80	0.15	3.42		
			1	6.60	4.20	0.15	4.16		
			1	16.00	1.50	0.15	3.60		
	bad reaches of 2nd main 4th cross road		1	6.00	3.80	0.15	3.42		
			1	6.60	4.20	0.15	4.16		
			1	16.00	1.50	0.15	3.60		
	BWSSB UGD cutting portion		1	160.00	2.00	0.15	48.00		
							73.23	**2001.28**	**146544.73**
	Basic Rate	1888.00							
	Area Weightage 6%	113.28							
	Grand Total	2001.28							
17	**KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion** on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21 6)	**sqm**							
	bad reaches of 2nd main road		1	3.50	2.50		8.75		
			1	2.00	2.50		5.00		
			1	3.20	1.50		4.80		
			4	3.80	1.50		22.80		
			1	5.20	3.60		18.72		
			1	3.80	2.90		11.02		
			1	15.00	1.20		18.00		
			1	3.60	2.20		7.92		
			1	15.00	1.80		27.00		

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			1	8.00	3.50		28.00		
			1	9.00	3.20		28.80		
			1	6.00	3.80		22.80		
			1	6.60	4.20		27.72		
			1	16.00	1.50		24.00		
	bad reaches of 2nd main 3rd cross road		1	15.00	1.80		27.00		
			1	8.00	3.50		28.00		
			1	9.00	3.20		28.80		
			1	6.00	3.80		22.80		
			1	6.60	4.20		27.72		
			1	16.00	1.50		24.00		
	bad reaches of 2nd main 4th cross road		1	6.00	3.80		22.80		
			1	6.60	4.20		27.72		
			1	16.00	1.50		24.00		
	BWSSB UGD cutting portion		1	160.00	2.00		320.00		
							808.17	28.62	**23129.83**
	Basic Rate	27.00							
	Area Weightage 6%	1.62							
	Grand Total	28.62							
18	KSRRB 500-2. **Cleaning the existing black topped surface with brooms, soft brushes and finally** dusting with old gunny bags and /or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 Page No.158. Item No.21.2	**Sqm**			**avg**				
	2nd main road		1	236.50	5.30		1253.45		
	2nd main 3rd cross road		1	115.00	5.00		575.00		
	2nd main 4th cross road		1	39.00	4.50		175.50		
							2003.95	**5.30**	**10620.94**
	Basic Rate	5.00							
	Area Weightage 6%	0.30							
	Grand Total	5.30							

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	KSRRB M500-17. **Providing and laying Dense Graded Bituminous Macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.** MORTH Specification No. 507. Using 100/120 TPH capacity HMP with sensor paver Gr-II (50 mm to 75mm) with 4.5% VG-30 Bitumen. Page No.160. Item No.21.17.2	**Cum**							
	DBM				avg				
	2nd main road		1	236.50	5.30	0.05	62.67		
	2nd main 3rd cross road		1	115.00	5.00	0.05	28.75		
	2nd main 4th cross road		1	39.00	4.50	0.05	8.78		
							100.20		
							100.20	**6789.30**	**680270.89**
	Basic Rate	6405.00							
	Area Weightage 6%	384.30							
	Grand Total	6789.30							
20	KSRRB 500-7. **Providing and applying tack coat using 80/100 grade bitumen (VG10) on the** prepared black topped surfaces at 0.25 kg per sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Chapter 5 Page No.158. Item No.21.7	**Sqm**			avg				
	2nd main road		1	236.50	5.30		1253.45		
	2nd main 3rd cross road		1	115.00	5.00		575.00		
	2nd main 4th cross road		1	39.00	4.50		175.50		
							2003.95	**12.72**	**25490.24**
	Basic Rate	12.00							
	Area Weightage 6%	0.72							
	Grand Total	12.72							

	...ing and laying bituminous ...crete 40mm thick with hot ... plant, using crushed ...ggregates of specified grading, ...remixed with bituminous binder ...d filler, transporting the hot mix to ...ork site, laying with a paver finisher ... the required grade, level and ...lignment, rolling with smooth ...wheeled, vibratory and tandem ...llers to achieve the desired ...compaction in all respects complete ...as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015.do- using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4% of modified bituminous binder consisting of 4.97% ofVG-30 bitumen (60/70 grade} and 0.43% of plastomeric thermoplastics (waste plastic) Page No. 171. Item No.21.78.12	Cum			avg					
	BC		1	236.50	5.30	0.04	50.14			
	2nd main road		1	115.00	5.00	0.04	23.00			
	2nd main 3rd cross road		1	39.00	4.50	0.04	7.02			
	2nd main 4th cross road						**80.16**	**7753.90**	**621537.12**	
	Basic Rate	7315.00								
	Area Weightage 6%	438.90								
	Grand Total	7753.90								
22	**Providing and fixing of retro - reflectorised cautionary, mandatory and informatory sign as per IRC:67 made of high intensity grade sheeting vide Clause** 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 em x 45 cm x 60 em, 60 cm below ground level as per approved drawing Page No.180. Item No.24.2	**Nos**								
	2nd main road		2	118.00			236.00			
	2nd main 3rd cross road		2	58.00			116.00			

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
2nd main 4th cross road								
		2	20.00			40.00		
Basic Rate	130.00					392.00	137.80	54017.60
Area Weightage 6%	7.80							
Grand Total	137.80							
KSRRB M800-4. Direction and Place Identification Signs / Project information Board with size more than 0.9 sqm Size Board:- Providing and erecting direction and place identification retro- reflectorised sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 em, 60 em below ground level as per approved drawing. Page No.180. Item No.24.4	Sqm								
		4				4.00		
Basic Rate	7139.00					4.00	7567.34	30269.36
Area Weightage 6%	428.34							
Grand Total	7567.34							

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	SRRB M800-13. Road marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 Page No.182. Item No.24.15	Sqm							
	2nd main road		1	158.00	0.10		15.80		
	2nd main 3rd cross road		2	236.50	0.15		70.95		
			1	76.67	0.10		7.67		
	2nd main 4th cross road		2	115.00	0.15		34.50		
			1	26.00	0.10		2.60		
			2	39.00	0.15		11.70		
	Basic Rate	429.00					143.22	454.74	65126.35
	Area Weightage 6%	25.74							
	Grand Total	454.74							
26	Miscellaneous charges								
							Total construction cost		2674666.00
							GST 12%		320959.92
									4374.08
							Total		3000000.00

(Rupees thirty lakh Only)

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per C.S.R. of 2018-19
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer

Administrative Approval

Accorded For RS 30 'w Palahanka
Head of A/C P3726
CER NO : 250 Dt: 29.03.2020

TA CE (YNK),

Executive Engineer
Yelahanka Division
Bangalore-64

Assistant Executive Engineer
Yelahanka Sub Division
Bangalore-64

Technical Sanction

Accorded For RS 30'w Palahanka
Head of A/C P3726
CER NO : 362 Dt: 27.03.2020

TA : CE (YNK),